SUSTAINABLE STRATEGIES AND FINANCIAL PERFORMANCE OF MALAYSIAN PROPERTY DEVELOPERS

Boon Tik Leonga, Lam Tatt Soonb, Khen Jhun Kamc, Shir Men Tayd

ac&dSchool of Architecture Building and Design, Taylor's University, Subang Jaya, Selangor, Malaysia

^bHeriot-Watt University Malaysia, Putrajaya, Malaysia

*Corresponding author Email: boontik.leong@taylors.edu.my

Abstract

Property development in developing countries provides space for economics activities however property development process and operation of the property are known to be the major contributor to environment degradation. These activities consume substantial resources and energy, and release greenhouse gasses. By using content analysis, this paper first summarized and categorized the sustainable strategies of listed property developers in Malaysia from 2010 to 2014. This paper also evaluated financial performance of the said developers following by further examined the correlation of the sustainable strategies with the company characteristics, including size, growth, profitability, leverage. The analysis shows there is no significant correlation between sustainable strategies and the company size. However, there are correlation between sustainable strategies and other financial performance, in which, green developers are more sensitive in term of revenues. Both assets and liabilities of green developers grow faster that than conventional developers. On the other hand, the share market show more confident towards conventional developers than the green developers. This research provides important insight for the industry players for strategic planning and act as a reference to authority to plan for policies related to sustainable development.

Keywords: Malaysia, Property Developer, Sustainable Strategies

1. INTRODUCTION

The Bruntland Commission, formerly known as World Commission on Environment and Development defined Sustainable Development as the development which meets the needs of the present without compromising the ability of the future generation to meet their needs.

Property development and property operation support economics development and at the same time known as the major contributor to environment degradation. Its activities require continuous energy comsumption, resources consumption, waste generation, and green house gases emmission.

Pivo and McNamara (2008) first defined Sustainable and Responsible Property Investment (SRPI) as maximizing the positive effects and minimizing the negative effects of property ownership, management and development, on society and the natural environment in a way that is consistent with investor goals and fiduciary responsibilities.

Mokthsim and Salleh (2014) mentioned that Malaysia has yet to acheive the status of "sustainable development nation", but the government had looked in-depth on the development planned that would not destroy the good environment quality. This was proven when the Malaysia government established the Ministry of Energy, Green Technology and Water (MEGTW) through the reshuffling and restructuring of ministries in April 2009. The function of the newly formed ministry include planning, formulating policies and programs in green technology and green township. MEGTW is also responsible to coordinate the legislation, policies, guidelines, programs, activities and role of responsible agencies in implementiation of Green Neighbourhood. On the other hand, the government had allocated RM 1.5 billion as soft loans to the private sector through the Green Technology Financing Scheme.

Despite of the government's effort, the property developers play the important roles in developing green and sustainable building or even township.

Zainal Abidin's (2010) research found the developers in Malaysia are aware of the rising issues on sustainability, but little efforts were generated to support. Bueren & Priemus from Research for Netherland Sustainable Construction pointed out in 2002 that not the technical factors but the institutional factors that contrigute to the failure of sustainable constrution.

Stefan and Paul (2008) had illustrated in their research, the conventional wisdom concerning environment protection which comes as an additional cost imposed on firms, and will erode the competitiveness. However, they discovered the paradigm is being challenged in the 2000s.

In 2005, a study done by Rao on ISO 14001 has shown that certified companies had proven that the integrated green supply chain ultimately leads to competitiveness and economics performance.

It is clear that the property developers wish to know how a developer with sustainable strategy will benefit the company as a whole.

Newell and Manaf (2008) studied the significance of sustainability practices by the Malaysian property sector and conclude that a number of property companies take a strong leadership role in implementing best practice regarding sustainability. Expanded from Newell and Manaf's research, Razali and Adnan (2015) identified 16 attributes to measure companies' sustainability levels. The

attributes assessment revealed that only 15 per cent of listed property were seriously committed in implementing sustainable concept. There are several companies demonstrated leadership in sustainable practices through their projects. However these acheivements still fall below those of international players in other countries.

Anyway, there is yet an attempt to investigate the correlation of companies performance and the sustainability strategies which the industry players are keen to know.

This paper aims to study the correlation of the sustainable strategies and the company characteristics which include size, growth, profitability and leverage of property developers.

2. METHODOLOGY

Leong et. al. (2015) describe Green Developer as developer which incorporate additional green technologies in their project(s) and market themselves as developer that promote green and sustainable development.

The population of this study is the property developers listed in BURSA Malaysia under property sector. As at December 2015, there are total of 97 companies that are listed on main board - property. The companies which had changed the financial year end during the study period - 2010 to 2014, will be eliminated from the population, because the annual reports will consist of financial information which is not on a 12 months basis. The companies which are not listed throughout the whole study period will also be eliminated.

A total of 72 companies are listed as sample in this study, which consist of 74% of population The companies were categorized into 4 ranks according to the following criterion.

Rank Description The project won green/sustainable award or Project certified GBI, LEED, Green Mark or 1 Green/sustainable certification or and Published the achievements 2 Organised green/sustainable conference or Sponsored green/sustainable conference or Introduced green/sustainable features at project level or Adopted green technologies/materials at project level and Published the achievement Adopted green/sustainable practises 3 at company level 4 Complied to government regulation

Table 1: The sustainable strategy ranking criterion

Companies with rank 1 and rank 2 qualified as Green Developers with sustainable strategies.

Companies with rank 3 and rank 4 are considered as companies without sustainable strategies.

Following are number of property developers in each rank. 20 out of 72, which is around 28% of property developers qualify as green developers. 52 out of 72, which is 72% of property developers ranked 3 or 4 hence not qualified as green developers.

 Rank
 No. of Companies

 1
 9

 2
 11

 3
 9

 4
 43

 Total
 72

Table 2: Number of companies according to rank

The required financial data for each company was obtained from the annual reports filed in BURSA Malaysia and Thomson Reuters Data Stream. Full financial details, including balance sheet, income statement, and cash flow statement, were tabulated in excel in order to evaluate the financial performance of the companies.

The first analysis involves a randomness test to identify correlation between the level of sustainable strategy and the size of the property developer. All companies in the sample were assigned with two ranks, namely, the sustainable strategy rank as above and the ranking for the company size, i.e.: the company with highest assets value is ranked 1, follow by the second high asset value as 2.

The pair of rank were used to do Walk-Wolfwitz test, also known as a randomness run test to verify the randomness of the data.

Secondly, this paper examined the relationship between sustainable strategies and the financial performance. Ratios, growth rates and compound annual growth rate (CAGR) of companies' were derived from the financial data.

The property developers' characteristics of growth, profitability and leverage are studied in this paper, which includes: revenue growth rate, assets growth rate, liabilities growth rate, share price growth rate, market capitalisation growth rate, average return on equity, average return on assets and debt ratio.

The financial performance of green developers were compare with the preformance of conventional developers.

3. RESULTS AND DISCUSSION

Walk-Wolfwitz test's results as follow: Run test for randomness with 31 runs, p value = 0.12609

Conclusion: No real evident against randomness. Figure 1 indicates that there are big property companies that implemented sustainable strategies, there are also small companies which do so. The figure also suggests that a lot of big property companies do not rank as sustainable developers, at the same time many small companies also do not rank as sustainable. The random test concludes that the company size does not correlates to the level of strategies.

This concludes that the size of company do not correlate to the level of sustainable strategies.

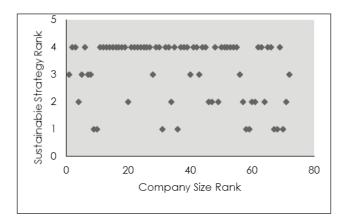


Figure 1: Sustainable strategy rank vs company size rank

The tables below compare the property developers' characteristics and performances between overall industry, conventional developers and green developers.

Table 3 shows the revenue growth for the industry, which recorded growth of 12% to 20% between 2011 to 2013. The green developers recorded higher growth than the conventional developers for all 3 years. In the year 2014, the market slowed down and recorded -7% growth for revenue, in which conventional developers made a 1% growth but the green developers suffered 14% dropped in revenue.

It is observed that the green developer's revenue growth is more sensitive than the industry as a whole. Overall green developers recorded CAGR at 11%, which is slightly better than CAGR 10% for conventional developers.

	<u> </u>					
Revenues Growth	2014	2013	2012	2011	CAGR	
Industry	-7%	20%	12%	19%	11%	
Conventional Dev	1%	12%	10%	17%	10%	
Green Dev	-14%	29%	14%	20%	11%	

Table 3: Revenue growth

Total assets growth for the industry do not show any negative growth throughout the study period. The 0% growth in year 2012 was caused by the -7% growth from conventional developers and was neutralised by the positive 10% growth from the green developers.

The green developers enjoyed a straight 4 years of positive growth for total assets and marked 13% CAGR which is more than double compared to the conventional developers at 5% growth.

Table 4: Total assets growth

Total Assets Growth	2014	2013	2012	2011	CAGR
Industry	10%	10%	0%	13%	8%
Conventional Dev	12%	8%	-7%	7%	5%
Green Dev	9%	12%	10%	21%	13%

Both total assets and total liabilities will give impact to the financial health of a company. The total liabilities for the industry have CAGR at 6%. Throughout the study period, the conventional developers increased and decreased the liabilities and end up not accumulating more liabilities but the green developers recorded 14% growth in total liabilities, which is 1% higher than the total assets growth.

Further analysis on leverage will be illustrated in Table 5 – debt ratio.

Table 5: Total liabilities growth

Total Liabilities growth	2014	2013	2012	2011	CAGR
Industry	11%	13%	-12%	16%	6%
Conventional Dev	17%	12%	-28%	5%	0%
Green Dev	7%	13%	7%	30%	14%

Cumulative share price is not proportionate to market capitalisation. It is due to the fact that the number of outstanding shares are different for each company. Anyway, the cumulative share price give a good indicator on the market confidence towards the company, or type of company as a whole.

The industry cumulative share price has CAGR of 8% for 2011 to 2014, the conventional developers contribute to in the price increase as the CAGR is 11%. At the same time, the share price of green developer has CAGR of -1%, which means the cumulative share price in 2014 is lower than 2011.

In year 2014, both conventional and green developers suffered dipped of share price at 2% and 12%, total up a 4% dropped for the industry. For the same period, KLSE recorded a dip of 6%, hence property industry is considered to perform better in 2014. The CAGR for KLSE index for 2011 to 2014 is 4%, which show property industry was doing better than KLSE as a whole for the study period.

Looking at the breakdown, the conventioanl developers perfom better than KLSE but green developers perfom lower than KLSE.

Table 6: Share price growth

Share Price Growth	2014	2013	2012	2011	CAGR
Industry	-4%	27%	15%	-2%	8%
Conventional Dev	-2%	31%	16%	3%	11%
Green Dev	-12%	12%	13%	-15%	-1%

Market capitalisation is the product of share price and the number of share. It is the market value of the company. The industry has 3% CAGR, in which conventional developers recorded 9% and green developer recorded -3%. Similar to with the share price, the performance of green developers are not as favourable as conventional developers in term of market capitalisation.

Table 7: Market capitalisation growth

Market Cap growth	2014	2013	2012	2011	CAGR
Industry	-2%	7%	16%	-8%	3%
Conventional Dev	1%	25%	12%	0%	9%
Green Dev	-5%	-9%	20%	-16%	-3%

Both return on equity and return on assets measures the profitability of the company. Table 8 illustrates that the conventional developers recorded better performance from 2011 to 2013 and green developers has superior performance for year 2014. The performance of convertional developers are more stable compared to the green developers.

Table 8: Average retun on equity

Average Return on Equity	2014	2013	2012	2011	2010
Industry	8%	8%	8%	7%	4%
Conventional Dev	8%	8%	9%	7%	5%
Green Dev	9%	8%	7%	6%	2%

Table 9 shows the average return on assets, the conventional developers showed more superior performance than green developers for all 5 years.

Table 9: Average return on assets

Average Return on Assets	2014	2013	2012	2011	2010
Industry	6%	6%	6%	5%	3%
Conventional Dev	6%	6%	6%	5%	4%
Green Dev	5%	5%	5%	4%	3%

Debt ratio has formula of total liabilities divided by total assets. The higher the debt ratio means the more the company relies more on liabilities to operate. The industry debt ratio fluctuated from 36% to 38%. The conventional developers always has lower debt ratio but the green developers have debt ratio ranging from 41% to 44%.

Table 10: Debt ratio (TL/TA)

Debt Ratio	2014	2013	2012	2011	2010
Industry	38%	37%	37%	38%	36%
Conventional Dev	36%	35%	34%	36%	35%
Green Dev	44%	43%	44%	44%	41%

4. CONCLUSION

Many will possibly think larger developers will have higher intention to diversify and be green developers. The research showed that the size of the developers do not correlate with the level of sustainable strategy implemented. There are huge developers that do not have sustainable strategy and there are small developers which keen to promote themselves as green developers.

As for the company characteristics and performance, it is found that green developers are more sensitive in term of revenues. They tend to grow more when the market is growing but lose more business when the market is not good.

Regardless of the revenues fluctuation, the assets of green developers increase at a favourable 13% annually. Anyway, the growth of liabilities is faster than the growth of assets, which is at 14% annually. This leads to an increasing debt ratio from 41% in 2010 to 44% in 2014. The green developers should take note on the high debt ratio and keep it at a tolerable level.

From the share price and the market capitalisation growth perspectives, it is found that the market has more confident in conventional developers compared to green developers.

It is suggested a further study on the characteristics and performance of green developers rank 1 and rank 2 to be made in order to capture the differences between chracterictics and performance when different level of sustainable strategies are implemented. The insight will be an important reference for future strategy generation and policies design.

BIBLIOGRAPHY

- Bueren, E. & Priemus, H. (2002). Institutional Barriers to Sustainable Construction. *Environment and Planning B: Planning and Design.* 29 (1) 75-86.
- Leong, B. T., Ang, F. L., Fuey Lin, A., Chiew, S. K. (2015). Does It Pays to Be Green? A Study into the Financial Performance of Malaysia Green Developer. *The 19th Pacific Association of Quantity Surveyors Congress 2015. Yokohama.*
- Newell, N. & Manaf, Z. (2008). The Significance of Sustainability Practices by the Malaysian Property Sector. *Local Economy.* 223 (3) 152-167.
- Mokthsim, N., Salleh, K. O. (2014). Malaysia Efforts Toward Achieving A Sustainable Development. Issues, Challenges and Prospects. *Precedia Social and Behavioral Sciences* 120, 299-307.
- Pivo, G., & McNamara, P. (2008). Sustainable and Responsible Property Investing. *Sustainable Investing:* The Art of Long Term Performance 117-127
- Razali, M. N., & Adnan, Y. M. (2015) Sustainable Property Development by Malaysian Property Companies. Property Management, 33(5), 451-477.
- Rao, P. & Holt, D. (2005). Do Green Supply Chains Lead to Competitiveness and Economic Performance? *Int Journal of Operations & Production Management.* 25 (9) 898-916.
- Stefan, A. & Paul, L. (2008). Does It Pay to Be Green? A Systematic Overview. *Academy of Management Perspectives*. 22 (4) 45-62.
- Zainal Abidin N. (2010). Investigating The Awareness and Application of Sustainable Construction Concept by Malaysian Developers. *Habitat International* 34 (4) 421-246.